WHAT IS CLAIMED IS:

1.   A method for matching user preferences with item
characteristics in an electronic database, wherein items are stored in a database along
with associated attributes and values, the database coupled to a processor and user
input device, the method comprising

accepting signals from the user input device to allow a user to specify
preferences in the form of attributes and values;

using the processor to identify one or more matches by using a
weighted comparison among at least one value in the preferences and at least one
value in the database.

2.   The method of claim 1, further comprising.
using a continuous weighting comparison.

3.   The method of claim 1, further comprising.
using a discontinuous weighting comparison.

4.   The method of claim 1, further comprising.
using a linear weighting comparison.

5.   The method of claim 1, further comprising
using a non-linear weighting comparison.

6.   A method for matching user preferences with item
characteristics in an electronic database, wherein items are stored in a database along
with associated attributes and values, the database coupled to a processor and user
input device, the method comprising

accepting signals from the user input device to allow a user to specify
preferences in the form of attributes and values;

using the processor to identify one or more user matches by using a
weighted comparison among at least one value in the preferences and at least one
value in the database;

10	using the processor to identify one or more item matches by using a
11	weighted comparison among at least one value in the database and at least one value
12	in the preferences; and
13	informing the user of best matches, wherein the best matches include at
14	least one match from the one or more user matches and at least one match from the
15	one or more item matches.

1	7.	The method of claim 1, wherein the step of using the processor
2	to identify one or more matches includes substeps of
3	identifying matches by deriving a value from the weighted comparison,
4	wherein values indicate a range of matches from strong to weak; and
5	using a condition to identify a match, wherein the condition results in a
6	match being identified where the match is not the strongest match.
1	8.	The method of claim 7, wherein the condition includes a
2	consideration of a profit margin in completing a transaction based on the identified
3	match, the method further comprising
4	selecting the match that results in the highest profit margin.

| 1 | 9. | The method of claim 1, further comprising |
| 2 | indicating the one or more matches to a user. |

| 1 | 10. | The method of claim 1, further comprising |
| 2 | initiating a transaction based on the one or more matches. |

1	11.	The method of claim 1, wherein an attribute has multiple
2	selections per attribute.
1	12.	The method of claim 1, wherein items are goods.
1	13.	The method of claim 1, wherein items are services.

1	14.	A method for matching buyer preferences with characteristics
2	of items being sold in an electronic marketplace, the method comprising
3	accepting input from buyers to define buyer preferences as
4	attribute/value pairs;

5   storing definitions of items as attribute/value pairs; and

6   using weighting information with the attribute/value pairs to match

7   buyer preferences with item characteristics by deriving a score for a match.

1   15.   The method of claim 14, wherein different weighting

2   information is associated with two or more item characteristics.

1   16.   The method of claim 14, wherein different weighting

2   information is associated with two or more buyer preferences.

1   17.   A method for generating a score for the strength of a match

2   between first and second sets of attribute/value pairs, the method comprising

3   deriving a first score to indicate the strength of a match of the first set

4   to the second set; and

5   deriving a second score to indicate the strength of a match of the

6   second set to the first set, wherein the first and second scores are not the same.

1   18.   The method of claim 1, wherein an attribute is the time at

2   which an event occurs.

1   19.   The method of claim 17, wherein the time attribute has a range

2   of values.

1   20.   The method of claim 1, wherein a location attribute is used to

2   indicate location, the method further comprising

3   computing the absolute difference between locations specified by first

4   and second location attributes;

5   using the absolute difference in identifying one or more matches.

1   21.   The method of claim 1, wherein attributes can have continuous

2   values.

1   22.   The method of claim 20, wherein an attribute represents

2   education in years.

1   23.   The method of claim 20, wherein an attribute represents size.

1   24.   The method of claim 20, wherein an attribute represents

2   weight.

1   25.   The method of claim 1, further comprising

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2   transforming a first value associated with a first attribute into a second

3   value associated with the first attribute, wherein the second value is used in place of

4   the first value to identify one or more matches by using a weighted comparison.

1   26.   The method of claim 1, wherein the user designates multiple

2   attributes and values to specify a preference.

1   27.   The method of claim 1, wherein the step of using the processor

2   to identify one or more matches includes the step of

3   using epsilon complementary slackness to identify the one or more

4   matches.

1   28.   The method of claim 1, further comprising

2   performing a subsequent matching operation after removing

3   preferences and characteristics of the one or more identified matches.

1   29.   A method for matching user preferences with item

2   characteristics in an electronic database, wherein items are stored in a database along

3   with associated attributes and values, the database coupled to a processor and user

4   input device, the method comprising

5   accepting signals from the user input device to allow a user to specify

6   preferences in the form of attributes and values;

7   using the processor to identify one or more matches after performing a

8   step of

9   substituting one or more attributes in the preferences.

1   30.   A method for matching user preferences with item

2   characteristics in an electronic database, wherein items are stored in a database along

3   with associated attributes and values, the database coupled to a processor and user

4   input device, the method comprising

5   accepting signals from the user input device to allow a user to specify

6   preferences in the form of attributes and values;

7   using the processor to identify one or more matches after performing a

8   step of

9   substituting one or more attributes in the characteristics.

1   31.   A method for matching user preferences with item

2 characteristics in an electronic database, wherein items are stored in a database along

3 with associated attributes and values, the database coupled to a processor and user

4 input device, the method comprising

5   accepting signals from the user input device to allow a user to specify

6 preferences in the form of attributes and values;

7   substituting one or more attributes in either the characteristics or the

8 preferences; and

9   subsequent to the step of substituting, performing the step of using the

10 processor to identify one or more matches by using a weighted comparison among at

11 least one value in the preferences and at least one value in the database.